



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,290	01/22/2004	Toru Sato	03500.017842.	3180
5514 7590 01/04/2007 FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			EXAMINER MAI, NGOCLAN THI	
			ART UNIT	PAPER NUMBER
			1742	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/04/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/761,290

Applicant(s)

SATO, TORU

Examiner

Ngoclan T. Mai

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 6-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>2/20/04, 6/7/04, 1/12/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's election with traverse of group I, claims 1-5 in the reply filed on 11/7/06 is acknowledged. The traversal is on the ground(s) that new claim 14 has been added which provides that the film is formed onto the substrate by physical vapor depositing (PVD) employing the sintered body of claim 1 and that the claimed product cannot be used in a materially different process, i.e. other than PVD. This is not found persuasive because the product as claimed as previously stated by the examiner can be used to make thin film by vapor deposition or evaporation which is different from the PVD process as required in the method of group II.

The requirement is still deemed proper and is therefore made FINAL.

2. Accordingly, claims 6-14 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 11/7/06.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshihara (U.S. Patent No. 6,197,457).

Yoshihara discloses method for forming thin film wherein the thin film is composed of an alloy comprising tungsten (W) and germanium (Ge) in total amount of 95 atomic% or greater, col. 5, l. 31-32, col. 6, l. 51-53 and germanium (Ge) in the alloy is in an amount of 1 to 30 atomic %, col. 5, l. 29-30 and col. 6, l. 47-49. Yoshihara also teaches the thin film is formed from by sputtering and the sputter target is composed of mixedly sintered of the components making up the alloy, col. 8, l. 24-32. Although Yoshihara teaches an alloy of the thin film having the concentration disclosed above and not sintered body containing tungsten and germanium in such amounts, the sintered target of Yoshihara would inherently contain tungsten and germanium having concentration substantially the same as the thin film because it is conventionally known in the art thin film formed by sputtering a target would have a composition approximately the same as the target material, see Nakamura 2004/0103750, para. [0008]. (Note that Nakamura is cited merely for showing this fact but not applied in the rejection). The sintered body recited in the instant claims reads on the sintered target of Yoshihara because although the Yoshihara teaches the amount of the germanium and tungsten in atomic percent, it is the examiners position that, when converted to weight percent, this amount inherently encompasses the claimed amount absent evidence to the contrary. In the alternative, no patentable distinction is seen to exist between the reference and the claimed invention in the absence of any evidence showing the contrary.

As for claim3 regarding the filling factor, since Yoshihara discloses the same material as in the instant claim, the properties as recited in the instant claims would have inherently possessed by the teachings of the cited reference. Therefore, the burden is on the applicant to prove that the product of the prior art does not necessarily or inherently possess characteristics attributed to the claimed product. In re Spade, 911 F.2d 705, 708, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990), In re Best, 195 USPQ 430 and MPEP § 2112.01.

Art Unit: 1742

5. Claims 1, 3, 4 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Whang (U.S. Patent No. 4,908,182).

Whang discloses a sintered body formed from binary alloy containing W and 0.1 wt.% Ge, col. 4, lines 24-59. Since the W and Ge are the only two in the alloy the sintered body would have more than 95 wt% germanium and tungsten. As for claim3 regarding the filling factor, since Whang discloses the same material as in the instant claim, the properties as recited in the instant claims would have inherently possessed by the teachings of the cited reference. Therefore, the burden is on the applicant to prove that the product of the prior art does not necessarily or inherently possess characteristics attributed to the claimed product. In re Spade, 911 F.2d 705, 708, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990), In re Best, 195 USPQ 430 and MPEP § 2112.01.

With respect to the intended use of the sintered body as target of a PVD apparatus or target for sputtering, recited in claims 4 and 5, respectively, the claimed intended use of the claimed alloy does not lend patentability to the alloy. A mere statement of a new use for an otherwise old or obvious composition cannot render a claim to the composition patentable. See *In re Lemin*, 51 CCPA 942, 326 F.2d 437, 140 USPQ 273 (1964), *In re Thuau* 135 F.2d 344, 57 USPQ 324 (CCPA 1943), *Ex parte Douros* 163 USPQ 667 (POBA), and *In re Craige*, 188 F.2d 505, 89 USPQ 393 (CCPA 1951).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoclan T. Mai whose telephone number is (571) 272-1246. The examiner can normally be reached on 9:30-6:00 PM Monday-Friday.

Art Unit: 1742

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

n.m.

ROY KING
SUPERVISORY PATENT EXAMINER
TECHNICAL CENTER 1700